STATEMENT OF
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REGION 2

BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON COMMERCE
SUBCOMMITTEE ON FINANCE & HAZARDOUS MATERIALS

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INTRODUCTION

Good afternoon Chairman, and Members of the Sub-Committee. I am pleased to have this opportunity to appear before you to discuss the Superfund program. My name is Richard L. Caspe. I am the Director of the Emergency and Remedial Response Division for the United States Environmental Protection Agency, Region 2. This Region includes the States of New Jersey and New York, the Commonwealth of Puerto Rico, and the United States Virgin Islands.

I appreciate the opportunity to review Region 2's experiences in carrying out the Superfund program, both under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), and under the Superfund Amendments and Reauthorization Act of 1986 (SARA).

Today, I would like to provide you with an overview of the current status of the program, and touch briefly on some of the administrative changes that have made Super-fund a fundamentally different program than it was just four years ago.

Nationally, through EPA's use of Trust Fund monies and its authorities to require private parties to conduct response actions, the Agency has completed cleanup at 423 sites on the National Priorities List (NPL). The President's budget request for Fiscal Year 1998 would enable EPA to complete cleanup at 900 sites by the year 2000, representing approximately two-thirds of sites currently on the NPL. Additionally, since 1981, approximately 4,000 emergency cleanup actions have been completed, with over 1,200 of these actions occurring at sites on the NPL.

Currently, responsible parties finance more than 70% of Superfund long-term cleanups, saving taxpayers more than $12 billion. As an important goal of the Administrative Reforms, EPA continues to promote fairness in the Superfund enforcement program by reaching settlements with more than 14,000 small parties at Super-fund sites.

-THE REGION 2 SUPERFUND PROGRAM

The completion of 423 Super-fund toxic waste site cleanups nationally (as of February 21, 1997) is just one indication of the record pace EPA has set for cleaning up Superfund sites. Here in Region 2, EPA, along with ATSDR, the Environmental Agencies from the States of New Jersey and New York, the Commonwealth of Puerto Rico and the US Virgin Islands, has established an effective partnership which, I believe, accounts for the accomplishments I will describe in addressing the pre-remedial, removal, non-NPL, and NPL sites in our Region.

In Region 2, sites are characterized as either state or federal lead, and as either fund or enforcement lead. EPA and the State Agencies agree up-front which is the most appropriate lead agency at each site. Enforcement lead sites are those where EPA or the State has identified responsible parties to negotiate with to carry out the work. The Superfund Trust Fund is utilized to finance the work at “orphan” sites where no financially viable responsible parties have been found, or where the site conditions are such that we cannot rely upon responsible parties, such as in the case of public health emergencies or when recalcitrant responsible parties will not agree to conduct the cleanup activities. Where the Trust Fund is used, EPA later attempts to recover that money, to the maximum extent practicable, from the responsible parties.

At this time, some kind of Federal or State action is underway or has been completed at all 216 NPL sites in our Region. Action at NPL sites progresses through several stages: a remedial investigation to define the problem, a feasibility study of remedial alternatives, perhaps an interim remedial measure, a Record of Decision (ROD), which selects the appropriate remedy, a detailed design producing plans and specifications for the selected remedy, and finally, the construction and implementation of that remedy. Remediation completion and deletion are the final stages. EPA may address site remediation in phases or operable units in order to deal with the worst aspects of a site first. For some sites, this means that there may be more than one ROD.

The Region 2 Super-fund Program Federal site expenditures and enforcement settlements total 53.5 billion since 1981. Enforcement settlements account for $1.75 billion, and Remedial Trust Fund expenditures account for $1.78 billion. In New York, 51.34 billion has been expended to date, of which enforcement settlements total 59.03 million and 5440 million of fund expenditures. In New Jersey, the total expenditures and enforcement settlements are $2.13 billion, of which enforcement settlements account for $805.4 million and fund expenditures total 5 1.326 billion In Puerto Rico and the US Virgin islands, 559.9 million and $4.1 million respectively in combined expenditures and settlements have been achieved.

Site Assessment

EPA has historically kept track of all potential hazardous waste sites in an inventory known as the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS). From the entire historical inventory of 3,780 pre-remedial sites in Region 2, approximately 2,041 or 54% of sites have been archived and categorized as needing “no further EPA action”. Hundreds of additional sites have either been assessed, or assessed and inspected, and will likely be archived with the expectation that no further EPA action is necessary. Our Regional effort has contributed to the removal of approximately 30,000 sites nationally from CERCLIS as a part of the Superfund Administrative Reforms.

Progress at NPL Site Cleanups

Of the 216 NPL sites in the Region (116 sites in New Jersey, 88 sites in New York, 10 sites in Puerto Rico, and 2 sites in the US Virgin Islands), we have deleted 19 sites from the NPL. An additional 32 sites (15% of all Region 2 sites) are in the construction completion stage, meaning that all construction work at the site is complete and the site requires long-term pump and treat to clean the ground water. A total of 97 sites (44% of the total sites in the Region) are in construction. We have only 37 sites (16% of our sites) in the design stage or design pending, and only 29 sites (14%) are under study. No sites in the Region have a study pending,

Since our Region 2 program started cleanup in 1980, either through treatment, containment or removal, EPA has remediated billions of pounds of contaminated soils and sediments which have been excavated, removed, treated, if necessary, and properly disposed. We have removed or treated hundreds of thousand of gallons of products from abandoned sites and capped hundreds of acres of land filled hazardous waste.

Ground water cleanup in the Region has also been a major component of our remedial activity since many of the Super-fund sites have threatened or impacted water supply wells. In 1995, we estimated that ground water supply wells have been impacted at over 30 sites in New Jersey, over 25 sites in New York and 3 sites in Puerto Rico. Many of these wells have been closed and alternative supplies have been identified, or

the ground water is first treated in order to meet drinking water standards and distributed for use and consumption. The Region 2 Superfund program has treated billions of gallons of ground water contaminated with hazardous substances. We could not have accomplished so much without the aid of the States -- our partners

EPA has found that one out of every four Americans live within four miles of a Superfund site. At more than two-thirds of sites where people are exposed to hazardous substances, they are exposed from multiple sources and to multiple chemicals. Chemicals such as lead, PCBs, and TCE are routinely found at hazardous waste sites. Exposure to high lead levels can cause severe brain and kidney damage, PCB exposure can result in liver damage, reproductive effects and cancer; and TCE exposure can result in strokes and leukemia. When the Agency for Toxic Substances and Disease Registry determines that relocation is appropriate, EPA has relocated populations that are exposed to unacceptable levels of contaminants. The Grand Street Mercury site (16 residents temporarily relocated) in Hoboken, NJ and the Forest Glen site (53 families) in Niagara Falls, NY are two examples where EPA undertook relocation.

Non-NPL Site **Clean Ups**

Region 2 also has the ability to ensure cleanup of sites not yet on the NPL, where viable PRPs are identified and willing to conduct work at the site. These sites are cleaned up under an enforcement agreement and EPA or the State oversees the cleanup. The Janssen Inc. Site is a Non-NPL Site in Gurabo, Puerto Rico. Ground

water samples conducted on its premises revealed contamination of up to 472 ppm of chloroform. Soil samples revealed concentrations of up to 8,250 ppm of VOCs beneath the chemical plant building.

In September 1991, an Administrative Order on Consent was negotiated between Janssen Inc. and EPA in order to conduct a Remedial Investigation/Feasibility Study. The Order allowed for the implementation of early response activities, such as pumping and treatment of the contaminated ground water, in order to prevent further migration of the contaminants.

As part of the accelerated response actions, a Soil Vapor Extraction system was placed in operation at the chemical plant building in March 1993. An Interim ROD was signed in September 1993. The ROD selected a Steam Air Stripper to address the ground water contamination and directed that the Soil Vapor Extraction system placed in operation in March 1993 continue to operate. As of September 1996, 1,072 pounds of VOCs have been removed from the soil beneath the chemical plant building.

Due to EPA's and the responsible party's strong initiative and commitment, it was possible to initiate the operation of a Steam Air Stripper measuring 80' tall by 5' in diameter within fourteen months of the ROD. As of November 1996, the ground water treatment system has treated 56,709,584 gallons of contaminated ground water and approximately 2,160 pounds of chloroform have been removed from the aquifer.

The accelerated response has effectively contained the plume and reduced the concentration of VOCs in soil and ground water. Recent samples have shown a reduction in ground water contamination from 472 ppm to 15 ppm and soil contamination from 8,250 ppm to 8.6 ppm within three years.

In addition, in Region 2, tens of millions of dollars have been spent by cooperative responsible parties such as Janssen, Inc. to cleanup sites before they are placed on the NPL.

NPL Sites

Expedited Cleanups

I would like to provide you with two site-specific examples of an approach used by Region 2 to accelerate cleanup. By taking early action while assessing long-term clean up and removing the worst threats to people and the environment first, the long-term response action can, in many instances, also be expedited.

Radium Chemical Company - Woodside Queens, NY

The Radium Chemical Company site is located at 60-06 27th Avenue literally next to the Brooklyn Queens Expressway in Woodside, Queens County, New York, in a light industrial/residential sector. The RCC site consisted of a one-story brick building, owned by RCC. The Site also included the area occupied by an adjoining building, leased by RCC from the Solux Company.

Founded in New York in 1913, RCC initially produced luminous paint for watch dials and instruments. Later, the company manufactured, leased and sold radium-226 in the form of implant sources to hospitals, medical centers, and research laboratories. The radium and radon devices were stored on-site in lead containers in a brick vault room. Eventually the demand for radium sources lagged as they were replaced with advanced radiotherapy techniques using cesium and cobalt sources. Subsequently, many leased radium sources were returned to RCC and were stored on-site.

In 1983, the State of New York suspended the RCC operating license due to various disposal and safety infractions. The New York State Department of Labor issued its first Stipulation and Order against RCC on October 17, 1987 for the removal of the radium sources and decontamination of the building. The owner, unable to finance the remediation, abandoned the building. This resulted in a second Stipulation and Order, issued on July 20, 1988, determining that the facility could not be maintained and that it was *de facto* abandoned by RCC. Remaining on-site were a large number of radium-containing sealed devices, some of which were suspected of releasing radium and radon gas. Also on-site were hundreds of containers of laboratory chemicals, many of which were reactive, corrosive, flammable, and/or potentially shock-sensitive.

In July 1988, at the request of New York State, EPA initiated an emergency removal action under CERCLA. The removal action, which was funded from the Trust Fund, was completed in October 1989. Approximately 120 curies of radium in the form of

sources, contaminated debris, and loose radium salts and luminous compounds were removed from the Site and delivered to licensed facilities. On November 21, 1989, the RCC Site was added to the National Priorities List.

Using the extensive sampling data taken as part of the emergency removal action, EPA prepared a Focused Feasibility Study in April 1990 to characterize the nature and extent of the contamination still remaining at the Site and to describe various remedial alternatives for addressing the contamination.

On June 21, 1990, a Record of Decision was signed, selecting as the remedy for the Site partial decontamination with dismantlement of the RCC building, excavation of contaminated soils and subsurface piping, treatment of various radium-contaminated hazardous wastes, and transportation of wastes off-site to permitted waste disposal facilities.

Approximately 1,148 cubic yards (or 812 tons) of radioactive soil and debris and 92 cubic feet of radium-contaminated hazardous wastes were transported to a licensed facility. Approximately 862 tons of uncontaminated masonry and concrete building debris were transported for disposal. Approximately 2.5 curies of tritium watch faces were transported for disposal. Approximately 36.7 kilograms of radium-contaminated elemental mercury were transported for decontamination, followed by disposal Approximately 1.03 millicuries, associated with a radium calibration source, were

transported for use in radon-generation research. The total remedial cost was $11,525,000. The Site was deleted from the NPL on March 24, 1995.

White Chemical Site - Newark, NJ

The White Chemical Site, located at 660 Frelinghuysen Avenue in Newark NJ, contained over 11,000 55-gallon drums, several hundred cylinders, tank and vats, and a number of rooms with thousands of lab-size containers. When the NJ Department of Environmental Protection (DEP) discovered the site, they found threatening conditions including spills and releases of hazardous substances, damaged, fuming and bulging drums, and the storage of incompatible materials. DEP began a removal action at the site. After removing nearly 1,000 drums, DEP asked EPA to assume responsibility for the cleanup. EPA subsequently began packing the deteriorated drums and removing the material for off-site disposal in September 1990.

The Region moved quickly, working with the Agency for Toxic Substances and Disease Registry to add the White Chemical Site to the NPL using a quick listing procedure. At the same time, we took removal actions to stabilize the site, EPA staff prepared, in-house, a feasibility study of remedial alternatives and the documentation necessary to list the site. As a result of these accelerated and combined efforts, the White Chemical site was added to the NPL on September 26, 1991. Remedial funds were immediately authorized to continue the ongoing cleanup without interruption. The Agency

subsequently spent approximately $10.5 million stabilizing the site, removing 11,000 drums and over 100 gas cylinders, and emptying the contents of about 115 tanks.

While the removal and remedial efforts were in progress, EPA undertook an extensive investigation resulting in the identification of ten potentially responsible parties. On April 10, 1992, EPA issued a Unilateral Administrative Order to the parties for the completion of the remedial action. Three of the parties complied with the Order and assumed the cleanup under EPA's direction. Thus, in less than three years, as a result of our pre-remedial, remedial, removal and enforcement staff working together, the site was identified and listed and the surface cleanup completed. The most significant threat from the site to the residents and workers in Newark was removed.

Long-Term Response Action

Many sites that are on the NPL present very difficult technical challenges that require a multi-year effort or significant enforcement resources to ensure that those responsible for the contamination pay to clean up the site. These sites are addressed in the Remedial program. Two examples demonstrating the complexity of NPL site cleanup are the Bridgeport Rental and Oil Services site in NJ, and the Marathon Battery Site in NY.

Bridgeport Rental and Oil Services

The "BROS" site, in Logan Township, NJ, encompasses about 30 acres in a rural and agricultural area. It is bordered by a peach orchard on its western edge and a swampy area leading to a stream, Little Timber Creek, to the East. Prior to EPA's activities, the site consisted of a tank farm containing over 100 tanks and process vessels, thousands of drums, a number of tank trucks, and a 13-acre waste oil lagoon.

When EPA began addressing the environmental problems at the BROS site, many of the tanks contained oil contaminated with polychlorinated biphenyls (PCBs) and other hazardous substances. There were reports of several incidences of spills from the tanks onto the surface soils. The waste lagoon contained a floating oil layer and a sludge/sediment layer at the bottom, both contaminated with PCBs and other organic and inorganic compounds. A layer of the lagoon contained approximately 70 million gallons of water contaminated with several organic compounds. The lagoon overflowed its eastern bank in the early 1970s, contaminating about three acres of the adjacent swamp area, as evidenced by severely stressed and dead vegetation.

Ground water in the vicinity of the lagoon was found to be contaminated with a variety of volatile and semi-volatile organic compounds and metals.

In 1982, EPA undertook an emergency action which included the pumping and treatment of the lagoon's aqueous phase to lower the lagoon level and prevent

overflow. In 1983, EPA again took action to further reduce the liquid level and stabilize the site until a longer-term cleanup of the lagoon could begin.

After discovering that ground water wells in the vicinity of the BROS site were contaminated, EPA conducted a private well sampling program including 33 area homes. Based on the sampling results, three of the homes were supplied with granular activated carbon units in order to treat the contaminated ground water prior to its use. In April 1987, EPA, through a cooperative agreement with the New Jersey Department of Environmental Protection, completed the extension of a public water supply pipeline from an existing pump station in Bridgeport to those homes with wells affected by contamination from the site.

The cleanup work at the tank farm began in April 1987 and was completed in April 1988, at a contract cost of $8.5 million. The remedial activities included the demolition and removal of approximately 100 tanks and process vessels used to store hazardous wastes, off-site disposal of approximately 400,000 gallons of oils and sludges contained within the tanks and process vessels, demolition and off-site disposal of buildings, drums and other miscellaneous site debris, and the construction and operation of a wastewater treatment system with treatment of over 20 million gallons of aqueous lagoon wastes.

The lagoon cleanup included the following specific remedial activities: the removal and incineration of more than 172,000 tons of contaminated material including 138,350 tons of underlying lagoon sediments and sludges, 3,850 tons of lagoon oil, 12,550 tons of lagoon levee material, 4,250 tons of area soils contaminated with PCBs from lagoon overflows in previous years, and 13,000 tons of debris; the removal of approximately 5,200 floating and buried drums and disposal either off-site or through on-site incineration; the removal and off-site disposal of 4,300 tons of contaminated debris; and, the pumping and treatment of over 190,000,000 gallons of lagoon water through the existing aqueous wastewater treatment system to remove volatile organic and inorganic contaminants. Through this effort, the lagoon water level was maintained at or below the natural ground water level at the site. Finally, the site was graded, with a topsoil cover, and reseeded. The entire former lagoon area has now been seeded.

In fiscal year 1996, EPA settled the cost recovery case for this site resulting in the largest Superfund settlement to date with a value of $222 million.

Marathon Batterv Site - Cold Spring Harbor. NY

The Marathon Battery Company Site is located in the Hudson River Valley in Cold Spring, New York across the river from West Point. The 350 acre site includes the battery manufacturing plant and grounds, the adjacent residential neighborhood, the Hudson River in the vicinity of the Cold Spring Pier, Constitution Marsh, and Foundry Cove and Marsh. The plant was built in 1952 by the US Army to produce nickel-cadmium batteries for NIKE missile bases. Battery production ended in 1979. The

building was then used as a book warehouse until 1986. Two million books contaminated with cadmium dust remained in the building when it closed. At the peak of battery production, the plant used approximately 200 million gallons of water a year from an on site production well. Untreated liquid wastes were pumped into the Cold Spring sewer system for discharge directly into the Hudson River. Roughly 10% of the time, the pumps were shut down for maintenance and the waste was then discharged into Foundry Cove via a gravity feed storm sewer.

In 1981, the Marathon Battery Company site was proposed for the National Priorities list and was added in 1983. Remedial investigations were begun at that time. The first of three Record of Decisions was signed in 1986 with the remaining RODs signed in September 1988 and 1989. When the last ROD was completed, EPA decided to join all three cleanups and complete the design as one project in order to reduce capital costs. Initially, the PRPs for the site did not agree to perform the cleanup. In 1989, EPA issued a Unilateral Order to the PRPs to decontaminate the interior of the battery plant and remove the books to eliminate the existing fire hazard. Cleanup of the interior and recycling of the books were both completed by the PRP in late 1992.

The design for the remaining work was completed in early 1992 and, in late 1992, a settlement was reached with all of the PRPs in a Consent Decree. The project was completed in the summer of 1995. One hundred eighty-nine thousand tons (189,000)

of soils and sediment were treated and transported via 2,000 railcars to an offsite landfill for final disposal.

The total value of the cleanup settlement is $120 million, of which $91 million went to cleanup and the remainder to past costs and long term monitoring. The Marathon Battery Company site was deleted from the National Priorities List on October 18, 1996. Subsequent to deletion, Scenic Hudson, Inc., a non-profit conservation organization purchased a substantial portion of the site property. The purchase was facilitated by a Prospective Purchaser Agreement between Scenic Hudson and EPA.

Promoting Economic Redevelopment

Across the country, EPA is promoting the redevelopment of abandoned and contaminated properties once used for industrial and commercial purposes known as "brownfields". The Brownfields reforms are directed toward empowering States, communities, and others to work together to assess, safely clean up, and reuse these sites. EPA efforts are being accomplished through the Brownfields Action Agenda – an outline of specific actions the Agency is conducting.

Brownfields Pilots are Encouraging Redevelopment

The Brownfields Assessment Pilots form a major component of the Brownfields Action Agenda. EPA exceeded its commitment to fund at least 50 pilots by actually funding 76

pilots at up to $200,000 each by the end of 1996. Recently, the Administrator announced the addition of 2 additional pilots, bringing the total to 78. These two-year pilots are intended to generate further interest in Brownfields redevelopment by bringing together public and private efforts, including Federal, State, and local governments the community and potential developers. The Brownfield pilots will develop information and strategies that promote a unified approach to site assessment, environmental cleanup, and redevelopment. Many different communities are participating, ranging from small towns to large cities.

The Presidents Budget includes a major expansion of EPA grants to communities for site assessment and redevelopment planning, and new support for revolving loans to finance Brownfields cleanup efforts at the local level. These proposals could prompt cleanup at thousands of sites nationwide.

In Region 2, EPA has awarded seven Brownfield pilot grants to date. The recipients of the $200,000 - 2 year grants are: New York City; Rochester, NY, Trenton, NJ, Newark, NJ, Rome, NY, Buffalo, NY, and, Camden, NJ. Five of our pilot cities were awarded grants through the national selection process, while Buffalo, NY and Camden, NJ are regionally funded. In the most recent round of Brownfields Pilot Program grants, 13 applicants are from Region 2 and we hope to receive 2-4 pilot awards from the national competition.

The Region 2 effort extends beyond awarding a grant. For example, the Region is in the process of placing an employee on a detail to Camden to assist the city in implementing its Brownfield Program grant. Camden is part of an empowerment zone/ enterprise community, (along with Philadelphia), whereby the City is receiving substantial funds from other sources. We hope that by placing an EPA employee in Camden we can assist in implementing the Brownfields initiative while effectively coordinating the use of Federal funds with the City and other Federal agencies such as HUD. We are also offering expertise (hydrological, emergency response, risk assessment, and site assessment) they may need to access for assessment of Brownfield sites. Our activities also include the development of a Region 2 Internet "Homepage" to provide users with Regional information and a link to the EPA's National Homepage. We are also initiating an "800" number that will provide toll free access to Brownfield information sources.

CONCLUSION

In these few pages, I have highlighted just a sample of the progress Region 2 has accomplished in implementing Super-fund. The figures accompanying this testimony illustrate the accomplishments of our program as well as some of the innovative approaches we have used to reach them. We are proud of the vast quantities of hazardous waste removed from sites in our Region and believe thatsueh

accomplishments demonstrate the great strides we have made in reducing risks to human health and the environment.